10/01495

ABSTRACT OF THE DISCLOSURE

A microelectronic package includes a microelectronic component, such as a sensor component, attached to a substrate by an attachment layer of an adhesive, in which approximately spherical The nominal diameter of the spacer elements are dispersed. spacer elements corresponds to a specified stand-off distance between the mounting surface of the electronic component and the substrate. The spacer elements are made of a plastic material having a coefficient of thermal expansion that approximates the coefficient of expansion of the adhesive (e.g. the expansion coefficient of the adhesive is no more than 10 times the expansion coefficient of the plastic material of the spacer elements). When temperature changes occur, the spacer elements do not rigidly maintain the stand-off distance and so lead to distortion, but instead absorb at least a small amount of the arising strain by elastically deforming.

> USPS EXPRESS MAIL EL 897 676 734 US OCTOBER 30 2001